Swarup Srinivasan

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EDUCATION

University of Toronto, Honors Bachelor of Science **Sep 2018 – Dec 2021**
Computer Science Co-op, Entrepreneurship Stream, 4th year
CGPA: **3.85** / 4.0 – Dean's List of Academic Excellence
Teaching Assistant: Software Engineering (CSCC01), Operating Systems (CSCC69)

World topper of Computer Science, Cambridge International A levels

SKILLS

- **Languages:** Python, Java, C++, C, HTML, CSS, JavaScript, WebAssembly, SQL
- **Frameworks:** React, React Native, Vue.js, Flutter, Spring Boot, Pandas, Spark, TensorFlow, Keras, scikit-learn
- **Concepts:** REST APIs, Multithreading, Agile methods (SCRUM, Test Driven Development), CI/CD
- **Tools:** Git, Jira, Amazon Web Services, Microsoft Azure Cloud, Google Cloud, Figma

EXPERIENCE

Amazon – Software Development Engineer Intern May 2021 – Aug 2021
- Design, implement and present features for multiple services to optimize product classification and retrieval using Java Spring Boot, Vue.js and serverless microservice architecture with AWS Lambda
- Automate AWS Cloud infrastructure setup for inter-service networking by writing CloudFormation scripts
- Maintain code compatibility with **100%** code coverage by writing unit and integration tests using JUnit and Mockito

BlackBerry – Software Developer Intern Sep 2020 – Dec 2020
- Developed a tool using WebAssembly to compile and execute a large analysis engine in-browser efficiently
- Debugged and fixed critical issues in a multithreaded threat analysis engine used by **10+** applications using C#
- Increased vehicle simulation dashboard performance by **50%** by simulating vehicle sensors in JavaScript
- Built data conversion tool with Apache Thrift RPC framework in Python for efficient data flow between **5+** services

University of Toronto – Machine Learning Engineer Intern Jan 2020 – Apr 2020
- Led development of tool to predict job finances with **86%** accuracy by using natural language processing to build machine learning models with TensorFlow and Python using Azure Databricks' distributed computing systems
- Optimized data pipeline by **67%** by creating Spark ETL jobs in Python to process **1000+** docs of **500+** words each
- Decreased MySQL query time by **15 minutes** by creating module to automate query generation

Google Developer Student Club – Software Developer Jan 2020 – Jun 2020
- Increased accessibility to essential resources such as food banks and homeless shelters in a team of 4 by creating a cross-platform mobile app using Flutter to retrieve location data offline using SMS **(GitHub)**

PROJECTS

Fitmotiv – (GitHub, Devpost) Jan 2021
- Fitness app to exercise with friends. **Won best use of Google Cloud** at Hack the North 2020++ out of **600 teams**
- Technology: Express.js, CockroachDB, Swift, Google Cloud, Vonage API, IBM NLU API

Virtual Queue Manager – (Website, GitHub) Jun 2020 – Aug 2020
- Web app to manage store queues with store searching and analytics, real-time queue monitoring, QR validation
- Technology: MongoDB, Express, React, Node.js, Google Maps API

Escape Room Game – (GitHub) Jun 2020 – Present
- 3D puzzle game with a ray-casting 'grabbing' system for players to move objects and escape the room
- Technology: C++, Unreal Engine

Spotify API Clone – (GitHub) Feb 2020
- REST API for a music player created using microservices to friend/follow users, like songs, create playlists, etc.
- Technology: Java, Spring Boot, MongoDB, Neo4j